<u>Appendix A</u>

Claim Chart Comparing Interfering Claims

Applicants' Claim 32	'196 Patent Claim 14

32.   A system for automated extraction of data from a molecular array having features arranged in a regular pattern, the system comprising:
 	
        a scanning component that produces **an image** of the molecular array representing intensities of data signals emitted from discrete positions on a surface of the molecular array;
 	
        a computer program that processes the **image** of the molecular array produced by the scanning component to **identify the location of** features in the **image** of the molecular array corresponding to molecules bound to features of the molecular array and that extracts data from the **located** features within **an image** of the molecular array;
 	
        and a computer for executing the computer program.
	14. A system for automated extraction of data from a molecular array having features arranged in a regular pattern, the system comprising:
	
	        a scanning component that produces **images** of the molecular array representing intensities of data signals emitted from discrete positions on a surface of the molecular array;
	
	        a computer program that processes the **images** of the molecular array produced by the scanning component to **index** features in the **images** of the molecular array corresponding to molecules bound to features of the molecular array and that extracts data from the **indexed** features within **images** of the molecular array;
	
	        and a computer for executing the computer program.

Applicants' Claim 33	'820 Patent Claim 1

33.   A method for evaluating an orientation of a molecular array having features arranged in a pattern, the method comprising:
 	
        (a) receiving an image of the molecular
	1. A method for evaluating an orientation of a molecular array having features arranged in a pattern, the method comprising:
	
	        (a) receiving an image of the molecular

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Applicants' Claim 33	'820 Patent Claim 1

array produced by scanning the molecular array to determine data signals emanating from discrete positions on a surface of the molecular array;
 	
    (b) calculating an actual result of a function on pixels of the image lying in a pattern; and
	array produced by scanning the molecular array to determine data signals emanating from discrete positions on a surface of the molecular array;
	
	    (b) calculating an actual result of a function on pixels of the image lying in a **second** pattern;
	
	    (c) comparing the result of step (b) with an expected result which would be obtained if the second pattern had a predetermined orientation on the array; and
	
	    (d) when the results of the comparison in step (c) are outside a predetermined difference, then altering the

(c) altering the orientation of the pattern on the array and repeating steps **(a)** and **(b)** as needed until the results of the comparison are within the predetermined difference.	orientation of the **second** pattern on the array and repeating steps **(b)** and **(c), and repeating the foregoing** as needed until the results of the comparison are within the predetermined difference.